

## Australian Shepherd Cancer Survey Summary Data

Total respondents: 534

### **Types of cancer:**

1. Hemangiosarcoma	26.4%
2. Lymphoma	16.8%
3. Lymphosarcoma	6.2%
4. Mammary	5.7%
5. Mast Cell	5.7%
6. Osteosarcoma	5.7%
7. Soft Tissue Carcinoma	5.4%
8. Squamous Cell Carcinoma	2.6%
9. Basal Cell Carcinoma	1.3%
10. Leukemia	0.77%
11. Melanoma	0.26%
12. Other	23.17%

Note: An unknown number of the cancers that were placed in the "Other" category would have likely have fallen in the categories above if the respondents had known the name of their dogs' cancers. Among those cancers reported as "Other" category, the most prevalent were cancers in the liver (11.7%), lung (7.4%), and heart (5.3%) which could be hemangiosarcomas.

**Metastasis:** 47.58% - of the submitted dogs' cancers had metastasized.

**Mortality:** 25.58% - Still iving at the time of the survey or had died of something other than cancer.

**Remission:** 17.78% - had responded to treatment and gone in to remission at the time of the survey.

### **Gender of Affected Aussies:**

Male: 51.7%  
Female: 48.3%

Note: 74.3% of the bitches were spayed. 70% of the dogs were neutered.

**Parents:** 16.53% of cancer dogs had at least one parent who had or had died of cancer.

Note: 8.9% of the Aussies with hemangiosarcoma also had a parent that with that cancer.

**Average Age at Diagnosis:** 9.21 years; standard deviation = 2.8 years

**Living Environment**

Agricultural:	32.8%
Urban/Suburban	53.3%
Other	13.9%

**Kennel**

Outdoors:	7.2%
Indoors:	92.8%

**Other Environmental Factors**

Location of dog's residence

Flea/Tick Treatment of living quarters/kennel:	18.1%
Near freeway/airport	15.3%
Near chemical plants	1.8%
Near high tension power lines	7.2%
Near storage facilities	0.5%
Near agricultural runoff	8.0%
In locations with spraying programs	11.9%

**Other Environmental Factors:**

Source of water:

City	56.8%
Well	35.9%
Other	7.3%

**Food provided for at least some time during life:**

Commercial Dry:	91.5%
Commercial Canned:	10.8%
Raw:	6.9%

Provided treatment with flea/tick/heartworm preventatives: 90.7%

**Occupation of dogs at least part of their lives**

Pet:	92.0%
Show:	36.7%
Performance:	40.3%

Stock Work:	14.5%
Search and Rescue:	1.3%
Other (incl. therapy dog):	6.5%

**Medications:** Although some information was gathered about non-oncologic medications given to the dog there were insufficient responses to this question and there was no discernible pattern among those for which we had reports.

**Pedigree Data** was compiled and examined for possible familial patterns. Two cancers showed such patterns: Hemangiosarcoma and lymphoma. Often both were found in the same pedigrees. Summary data on these two cancers follows.

### Hemangiosarcoma

Types:

Skin form:	4.9%
Splenic and heart combined:	5.8%
Heart form:	12.7%
Splenic form:	65.7%

Lethal	80%
Metastasis	63.7%
Remission	17.8%
Age at Dx	9.5 yr standard deviation 1.9 Low - 4 High - 14

With affected parents	8.9%
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Agricultural environment	31.4%
Suburban/urban	58.8%
Other	9.8%

City Water	61.8%
Well Water	33.0%
Other	5.2%

Dry food	96.0%
Raw	4.0%

Tick/flea/heartworm meds	96.1%
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Pesticide treatment in living area	22.5%
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Lived in kennel outdoors 11.7%  
Indoors 88.3%

Exposed to chemical plants 3.9%  
High tension lines 7.8%  
Storage facilities 0.9%  
Agricultural runoff 9.8%  
Spraying programs 14.7%  
freeways/airport 21.6%

### Lymphoma

Lethal 77.4%  
Metastasis 43.0%  
Remission 13.3%  
Av age at Dx 7.7 years, standard deviation 3.3 Low -1 High -14

Agricultural environment 38.5%  
Suburban/urban 46.0%  
Other 15.5%

City water 58.5%  
Well water 30.8%  
Other 10.7%

Commercial dry food 92.3%  
Canned 7.7%  
Raw 4.6%

(Note: Some fed a combination of dry and canned and.)

Treated with tick/flea/heartworm meds 91.8%  
Treatment with pesticides in living area 12.3%

Lived outdoors 10.8%  
Indoors 89.2%

Exposure to chem. plants 1.5%  
High tension power lines 9.2%  
Storage facilities 0.0%  
Agricultural runoff 7.7%  
Spraying programs 18.5%  
freeway/airport 4.6%